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(hb. Gray); Hacienda de Santiago, Zacatecas, communicated by Proj. A. Dugès, June, 1904 (hb. Gray).

The reported poisonous qualities of *B. arniatera* certainly raise a suspicion regarding the nearly related *B. erecta*, which is frequent in some grazing regions of our southwestern states where, in case of unexplained sheep-poisoning, it would be well for veterinarians to investigate the toxic effects of this plant.—B. L. ROBINSON, *Gray Herbarium*.

## SOME WESTERN SPECIES OF AGROPYRON.

Agropyron spicatum Vaseyi (Scribn. & Smith), n. comb.—A. Vaseyi Scribn. & Smith, U. S. Dept. Agr., Div. Agros., Bull. 4:27. 1897.

After a careful study of a large series of specimens I am disposed to regard A. Vaseyi as a depauperate form of A. spicatum.

Agropyron subvillosum (Hook.), n. comb.—*Triticum repens subvillosum* Hook. Fl. Bor.-Am. 2:254. 1840. *A. dasystachyum subvillosum* (Hook.) Scribn. & Smith. U. S. Dept. Agr., Div. Agros., Bull. 4:33. 1897.

Much field study of this grass has led me to regard it as a distinct species. With its slender culms and small spikelets it is certainly quite different in appearance from the stouter and larger-flowered A. dasystachyum and A. occidentale. Often it is not at all glaucous, but quite green, and the flowering glumes are sometimes merely scabrous. It is very common in this region, occurring on bench-lands and alkali flats.

**Agropyron Bakeri**, n. sp.—A smooth cespitose perennial, with stout culms,  $3-5^{dm}$  high: leaves rigid, flat, prominently striate-nerved; culm leaves three,  $12-20^{cm}$  long,  $2-4^{mm}$  wide, those of the innovations longer: spike  $9-12^{cm}$  long, scarcely exserted, equaled or exceeded by the uppermost leaf; spikelets terete,  $5-9^{mm}$  distant, 5-flowered,  $15-19^{mm}$  long: empty glumes  $11-12^{mm}$  long, two-thirds the length of the spikelets, 5nerved (the nerves scabrous), margins scarious, narrowly oblong, somewhat abruptly narrowed into an awn  $2-8^{mm}$  long, and with or without a tooth to one side at the base of the awn: flowering glumes scabrous or nearly smooth on the back, the strong midnerve extended into a rigid widely spreading awn  $10-35^{mm}$  long, often bidentate below the origin of the awn: palea equaling or somewhat exceeding its glume: rachilla scabrous. Related to *A. violaceum* and *A. Gmelini*, but distinguished by its stout culms,

firm and strongly nerved leaves, and long widely spreading awns. Type specimen in the Rocky Mountain Herbarium, collected by C. F. BAKER, no. 139, near Pagosa Peak in southern Colorado, altitude 2750<sup>m</sup> (9000 feet), August, 1899.—ELIAS NELSON, University of Wyoming, Laramie.